

NJDOT Bureau of Research
QUARTERLY PROGRESS REPORT
Date of report: September 20, 2009
Reporting period: July 1 to September 30, 2009

Project Title:	Portable Work Zone Barrier- Mobile Barriers		
RFP NUMBER: 2007-14	NJDOT RESEARCH PROJECT MANAGER: Edward Kondrath		
TASK ORDER NUMBER: RFCUNY 29 – Mod.#2	PRINCIPAL INVESTIGATOR: Robert Paaswell		
Project Starting Date: 1/1/ 2009 Project Ending Date: 12/31/2009	Period Starting Date: July 1, 2009 Period Ending Date: September 30, 2009		

Tasks for Phase I – Fabrication	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Task 2.1. Contracting with Mobile Barriers LLC	44.8%	100%	100%	44.8%
Task 2.2. Fabrication and Inspection of the Equipment	44.8%	100%	100%	44.8%
Task 2.3. Selection of Implementation Sites	2.6%	50%	50%	1.3%
Task 2.4 Equipment and Application Training	2.6%	100%	100%	2.6%
Task 2.5 Implementation, Monitoring & Cost Savings	2.6%	50%	50%	1.3%
Task 2.6 Final Document	2.6%	0%	0%	0%
TOTAL	100%			94.8%

Project Objective:

The objectives of this project are the fabrication, implementation, and evaluation of the Mobile Barrier Trailer (MBT-1) of Mobile Barriers, LLC as a portable protection device for the safety of New Jersey Department of Transportation workers in short duration highway work operations. This two-phase project will build on the results of the previous study, “Identification of Traffic Control Devices for Mobile and Short Duration Work Operations,” which identified the potential for a Mobile Barrier equipment to protect exposed highway workers along the shoulder and in the traveled lanes of high traffic, high speed areas.

Project Abstract:

This work will focus on the fabrication and implementation of the MBT-1 Beam which is a truck mounted, moveable, expandable beam that provides positive work zone protection comparable to a fixed concrete barrier. It is specifically intended to enhance worker safety when carrying out shoulder repair in work zones adjacent to guardrails, inlet repair, bridge rails, bridge deck repair, sound walls and other work where workers are normally exposed to traffic or behind cones in limited work areas for several hours. Usually the shadow vehicle or the truck mounted attenuator provides protection from rear end collisions; the new device provides protection from adjacent lane traffic.

The MBT-1 is designed to provide positive, steel beam protection system for exposed workers who normally work behind temporary cones and barrels in limited work areas. The MBT-1 was developed by Mobile Barriers, LLC. The device is currently implemented by Colorado DOT in Denver, CO.

1. Progress these quarters by task:

- The Mobile Barrier Trailer (MBT) has been fabricated and delivered to NJDOT.
- On July 13-14, 2009, a 2-day MBT training session was conducted at the NJDOT Hanover Maintenance Yard. The training was conducted by the MBT Manufacturer, Research Team and NJDOT Safety Unit. Participants were NJDOT employees, NJ Turnpike Representatives, and NJ Police Trooper.
- The MBT was taken to a site during a nighttime work operation. The site was selected by NJDOT and the work activities were for bridge deck repair and Barrier (or Guiderail) repair. The research team and NJDOT coordinated the transport of the MBT to the site and monitored its setup.

2. Proposed activities for next quarter by task, and anticipated percentage complete by end of quarter:

- NJDOT and the research team are planning additional field trips with the MBT.
- Implementation, Monitoring & Cost Savings.
- Preparation of the final report.

3. List of deliverables provided in this quarter by task (product date)

4. Progress on Implementation and Training Activities
NA

5. Problems/Proposed Solutions
NA

BUDGET EXPENDED AND REMAINING

Total Project Budget	\$257,297
Modified Contract Amount:	\$234,127
Total Project Expenditure to date	\$244,000
% of Total Project Budget Expended	94.8%